AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): A computer implemented method for scheduling processor jobs on a network of parallel machine processors or distributed system processors, comprising the steps of:

accumulating in buffers control information communications generated by each process performed by each processor during a defined time interval, where adjacent time intervals are separated by an intervening strobe ~~intervals~~ interval for a global exchange of the control information communications; and

performing the global exchange of the control information communications at the end of ~~each~~ the defined time interval during the intervening strobe interval so that each processor is informed by all of the other processors of a number of incoming ~~jobs~~ control information communications to be received by each processor in a subsequent time interval.

Claim 2 (previously presented): The computer implemented method according to Claim 1, further including the steps of:

running on each processor an ongoing process in the presence of a non-blocking communication call and storing control information relative to the non-blocking communication in a first descriptor;

yielding the processor to an operating system in the presence of a blocking communication call and storing control information relative to the blocking communication in a second descriptor while suspending the ongoing process and activating a ready process from a ready queue, if any; and

putting the ongoing process on the ready queue when the blocking communication call is completed.

Claim 3 (currently amended): The computer implemented method according to Claim 1, further including the steps of:

issuing a download command to each processor at the beginning of the intervening strobe interval;

downloading from each processor, at a command of each processor kernel at the beginning of the intervening strobe interval, accumulated control information communications ~~into the network for a total exchange~~ between all processors so that each processor is informed of the number and identity of incoming control information communications to be received in the ~~succeeding~~ subsequent time interval; and

scheduling by each processor kernel of communications accumulated prior to the intervening strobe interval to be delivered in the ~~succeeding~~ subsequent time interval.

Claim 4 (previously presented): The computer implemented method according to Claim 2, wherein each descriptor includes an identification of a type of communication, sending and receiving processors, and virtual addresses of the buffers.

Claim 5 (previously presented): The computer implemented method according to Claim 3, wherein each descriptor includes an identification of a type of communication, sending and receiving processors, and virtual addresses of the buffers.

Claims 6-7: Canceled.